Rhodora

38

[Vol. 59

connectivo apice 0.5 mm. projecto; ovario conico, glabro, ca. 3 mm. longo et 2 mm. diametro, 2-loculato, loculis pauci-ovulatis. Fructus non visus.

JAMAICA: PORTLAND PARISH: John Crow Mts., 2.5 miles southwest of Ecclesdown, alt. 2500 ft., R. A. Howard and G. R. Proctor 14841 (Arnold Arboretum—Type; Institute of Jamaica—Isotype), Sept. 14, 1956 (tree 12 ft. high; leaves lighter below; corolla white, fragrance sweet and spicy; stamens cream-colored).

This new species is undoubtedly an isolated endemic, probably confined to the John Crow Mts. of Jamaica. This is not unusual since isolated endemism is quite common in the family. Its closest relative is T. hartii. In habit and leaf characters the two species are quite similar. However, the latter species can be separated from T. howardiana by the characters found in the larger flowers. In T. hartii the pedicel measuring 1.5–5 cm. long is much sturdier and generally considerably longer. The sepals measure 6–7 mm. in length with the petals (ca. 8 mm. long) barely showing beyond the sepals. On the other hand, in T. howardiana the pedicels are shorter and distinctly more slender. The sepals are smaller measuring ca. 4 mm. in length with the petals nearly twice as long (7 mm.) and

extending conspicuously beyond the sepals.

A character, not generally observed in other species of *Tern-stroemia*, is found in the filaments of the stamens of *T. howardi-ana*. The lower two-thirds of both the long and the short filaments are conspicuously dilated while the upper third is thread-like. In most species the entire filament is thread-like. This observation was made from both the dried material from the herbarium sheet and preserved material fixed in the field by the collectors.—HARVARD UNIVERSITY, CAMBRIDGE.

DISTRIBUTIONAL AND NOMENCLATORIAL NOTES ON GALIUM (RUBIACEAE)

HUGH H. ILTIS

THE following data are partly a by-product of preliminary work on the *Rubiaceae* of Wisconsin (Urban and Iltis, 1957) and partly a result of field work in Arkansas during 1955. I wish to thank G. N. Jones and M. Bergseng for the loan of specimens from the University of Illinois Herbarium.

1957] Iltis,—Notes on Galium (Rubiaceae) 39

1. Galium brevipes Fern. and Wieg.¹ in Indiana. "Flora near Lake Michigan," swampy ground, Forsythe, Lake County, Indiana, September 13, 1879, E. J. Hill. (In Herbarium, Univ. of Illinois).

In Wisconsin and Indiana at least, this species is clearly distinguishable from its relatives; there can be no doubt that the collection cited above is of this small, intricately-branched, northern taxon. Hill's collection from Forsythe (which is

near the present Beverly Shores, Porter County (not Lake County!), directly on Lake Michigan) apparently came from a habitat very similar to the ones on the lakeshore in Wisconsin where G. brevipes occurs, namely from a moist or swampy swale behind the dunes. Although this species is not listed by Jones and Fuller (1955) for Illinois, it is likely that it once grew there, for its habitat, close to the cool lakeshore, has all but been obliterated by Chicago, Evanston and nearby cities. We may assume that G. brevipes has been extinct in Indiana for over 50 years, since the Umbach Herbarium at the University of Wisconsin, which contains perhaps 35,000 numbers mainly from the northern Indiana lakeshore, does not contain a single specimen of this taxon. Umbach was an unbelievably "voracious" collector, particularly in the area of the Indiana Dunes in northern Porter and Lake Counties, and it appears doubtful to me that in his decades of avid collecting he would have missed even so small a plant. Hill's collection of 1879 antedates not only Umbach's "hey days" by about 20 to 30 years but also the growth of Michigan City and of the Gary industrial area and the age of "Beach Cabins" with "improved" lots.

2. Galium labradoricum Wieg. in Illinois. Cedar Lake Bog near Lake Villa, Lake County, Illinois, June 3, 1942. G. N. Jones 15221: Marsh, 3 miles N. of Capron, Boone County, Illinois, 6/8/46. E. W. and G. B. Fell no. f 46344, (Both U. of Ill. Herb.); swampy ground along Nippersink Creek, N. end of Wonder Lake 2.5 mi. NW. of Ringwood, June 15, 1947. J. A. Steyermark 64533 (Chi. Nat. Hist. Mus.).

This species is not listed by Jones and Fuller (1955) because

the first two cited specimens were identified and presumably

¹Galium domingense, nom. nov., Galium brevipes I. Urban, Symbolae Antillanae 7: 415. 1912, not Galium brevipes Fern. & Wieg. RHODORA 12: 18. 1910. Urban's homonym refers to an endemic species of Haiti and Sto. Domingo, of which I have seen a specimen in the Missouri Botanical Garden Herbarium (Valeur 729). It proves to be a highly distinctive annual with minute leaves, and a 4-parted, pink corolla.

Rhodora

40

[Vol. 59

mapped as G. obtusum Bigel., a closely related species, of which G. labradoricum appears to be a specialized northern derivative, while the last specimen was annotated by the Austrian monographer of *Galium*, F. Ehrendorfer, as G. tinctorium! These stations, being in northernmost Illinois, fit in well with those in Wisconsin, where it occurs scattered through most of the state, with its occurrence in Indiana, where Deam (1940) shows it in eight of the twelve northernmost counties, and with the one station in North-central Iowa (Leyendecker, 1941).

3. Galium texanum A. Gray in Arkansas. Top of southern arm, Horseshoe Mountain (Little Short Mountain), 6 mi. W.N.W. of Paris, S.E. Franklin County, Arkansas. (93° 49' W.; 35° 19' N.). Elev. 1,000 ft. June 10, 1955. Hugh and Grace Illis 5412.

The above collection came from a steep, dry, rocky and sandy, south-facing Juniperus-Celtis glade, only about 5 yards from the upper edge of the vertical sandstone cliffs (Savanna Sandstone-Upper Pennsylvanian), high above the Arkansas River Valley on the S. E. edge of flat-topped, mesa-like Horseshoe Mountain. Galium texana grows there, straggling under bushes in grass, amidst Opuntia sp., Monarda fistulosa var. mollis, Hypericum pseudomaculatum, Valerianella longiflora, Astranthium integrifolium, Spermolepis echinata, S. divaricata, and Tragia urticifolia. Like the associated taxa, G. texanum is a southern species, previously known only from Texas and Oklahoma (Hopkins, 1943). The closest stations in the latter state are in Comanche Co., about 300 miles from the Arkansas station. Specimens have been deposited in the Herbaria of the Univ. of Wisconsin, Univ. of Arkansas, Southern Methodist Univ. and Pomona College, and in the Gray Herbarium.

I would like to thank Dr. L. H. Shinners for verifying the identification.

4. Galium boreale L. ssp. septentrionale (Roem. and Schult.) Iltis, comb. nov. Based on *Galium septentrionale* Roem. and Schult. Syst.

Veg. 3: 253. 1818. Galium boreale L. of all American authors, including its varieties, not G. boreale L. sensu stricto.

Löve and Löve (1954) clearly demonstrated that the American and eastern Asiatic form of *Galium boreale* L. *sensu lato* differs from the Eurasian form by several minor morphological characters (larger flowers, anthers and fruits, more pubescent nodes,

Iltis,—Notes on Galium (Rubiaceae)

1957]

41

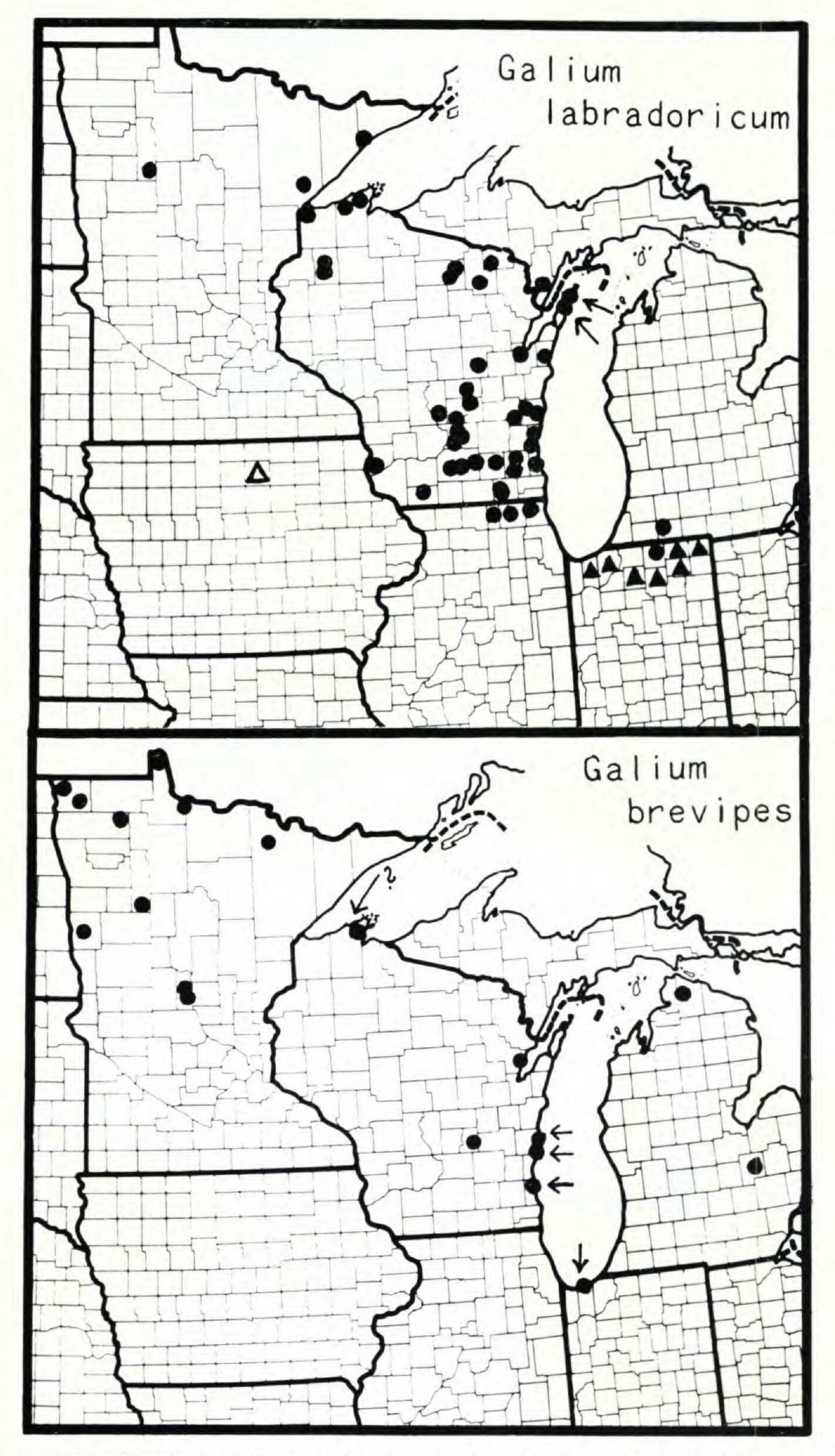


FIG. 1. Distribution of *Galium brevipes* and *G. labradoricum* in Wisconsin and nearby states. Dots represent specimens examined by the author in the herbaria of the Univ. of Wisconsin, Illinois, and Minnesota, Chicago Natural History Museum and Missouri Botanical Garden. Solid triangles represent collections cited by Deam (1940), the triangle the report of Leyendecker (1941).

Rhodora

42

[Vol. 59

and differently shaped bracts and panicles), and suggested that it should be called Galium septentrionale Roem. and Schult., a species based on the Galium boreale of Pursh's Flora. The Löves further demonstrated that G. boreale sensu stricto is tetraploid with 2n = 44, while the American and eastern Asiatic material is hexaploid, with 2n = 66. Since their distribution map shows a clearly allopatric supplementary distribution of the two forms, such as is usually found in subspecific entities, the forms furthermore showing some morphological overlap, it seems advisable to reduce the American-Asiatic taxon to a geographic subspecies of the Eurasian one. In fruit pubescence, the variability of ssp. septentrionale parallels that of ssp. boreale, and appears to be an interesting case of homologous variation. Since the varietal names currently used for the American forms are all based on European material of ssp. boreale, new varietal or form names for the variants of ssp. septentrionale must be found since such have never been published in conjunction with that subspecies. Galium septentrionale is described as a pubescent-fruited plant. Which of the two types of fruit pubescence Pursh's specimens show is not apparent from the description, though it is probable but not certain that it is of the sparsely pubescent form presently called var. intermedium. Should the Japanese plants of G. boreale prove to belong to ssp. septentrionale, as the Löves maintain, then four varietal names of Nakai and one of Maximowicz (cf. Nakai, 1939) will be available for our taxa, and their types will have to be studied. Because of these difficulties, I am not prepared at the present time to wrestle with the problems of nomenclature and typification of the forms of ssp. septentrionale, which falls beyond the scope of this study.-DEPARTMENT OF BOTANY, UNIVERSITY OF WISCONSIN.

LITERATURE CITED

DEAM, C. C. 1940. Flora of Indiana. Bloomington.

HOPKINS, M. 1943. Notes from the Bebb Herbarium of the University of Oklahoma II. RHODORA 45: 276-277.

JONES, G. N. and G. D. FULLER. 1955. Vascular Plants of Illinois. Univ. of Illinois Press, Urbana.

LEYENDECKER, P. J., JR. 1941. A taxonomic study of the genus Galium in Iowa. Proc. Io. Acad. Sci. 47: 101-113.

LÖVE, Á. and D. LÖVE. 1954. Cytotaxonomic studies on the northern bedstraws. Am. Midl. Naturalist 52: 88-105.

1957] Morton,—Misuse of the Term Taxon 43

NAKAI, T. 1939. Natural Varieties of Galium boreale and Galium verum found in East Asia. Jour. Jap. Bot. 15: 339-353.
URBAN, E. and H. H. ILTIS. 1957. Preliminary reports on the Flora of Wisconsin No. 37. (Submitted for publication to Proc. Wisc. Acad. Arts and Sci.).

THE MISUSE OF THE TERM TAXON:-Dr. H. J. Lam, of the

Rijksherbarium, Leiden, invented the neo-Greek word taxon (plural taxa), but he may live to regret the day. It was intended purely as a nomenclatural tool to replace the cumbrous expression "taxonomic group" that was formerly used in the International Rules of Botanical Nomenclature. The term was first proposed to the Symposium on Nomenclature called the "Utrecht Conference" that was held prior to the Seventh International Botanical Congress in Stockholm in 1950; it was adopted unanimously by the Conference, as reported in Chronica Botanica.¹ It seemed a happy idea at the time; this simple term facilitated the work of the Editorial Committee in drawing up the new wording of the International Code that resulted from the Stockholm Congress; and it also had the advantage of being usable internationally.² Some of the Rules of Nomenclature apply specifically only to families, or to genera, or to hybrids or other groups, whereas others apply to all groups equally, and it is here that the term taxon finds its legitimate use, as for example in Article 46: "A name of a taxon is not validly published when it is merely cited as a synonym." Taxon here denotes any nomenclatural category. To say that the word taxon "caught on" is to put it mildly. It has spread like wild-fire until now, only eight years after its invention, every student not only knows the word but thinks that he knows what it means—that is, just practically everything. We now read of "short-haired taxa," "taxa that grow in swamps," and so forth. This unlimited extension of the meaning is not only ridiculous, it is worse, not precise. To

use the word to mean plants, populations, races, species, or what have you, is to debase it and to turn it into a meaningless catch-all. It should be kept clearly in mind that a taxon is an abstraction and that it does not have leaves nor does it

¹ Vol. 12, p. 12. 1950.

² And so it has proved; some Latin American botanists have adopted it into Spanish so fervently that they are giving it the plural "taxones."